

## PATENT APPLICATION

Attorney Docket No.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reissue Application of Kazuo KURODA et al.

Reissue Application of US Patent No.5,920,530 issued on July 6, 1999

Filed: Herewith

For: ROTATION CONTROL APPARATUS OPERATING WITH  
A SYNC SIGNAL HAVING VARIABLE INTERVALSREISSUE DECLARATION UNDER 37 C.F.R. § 1.175

FILED

JUL - 6 2001

We, Kazuo KURODA, Masayoshi YOSHIDA and Toshio SUZUKI, all of Tokorozawa, Japan, do hereby declare and state as follows:

Our residence, post office address and citizenship are as stated below next to our names.

We believe that we are the original, first and joint inventors of the invention "ROTATION CONTROL APPARATUS OPERATING WITH A SYNC SIGNAL HAVING VARIABLE INTERVALS" which is described and claimed in the above-identified U.S. Patent No.5,920,530, issued July 6, 1999 and assigned to PIONEER ELECTRONIC CORPORATION, the specification of which is submitted with this application for reissue; and that we have reviewed and understand the contents of the specification, including the claims, as amended in this application for reissue.

In compliance with 37 C.F.R. § 1.175(a)(7) and 1.63(b)(3), we hereby acknowledge our duty to disclose information of which we are aware which is material to patentability as defined in 37 C.F.R. § 1.56.

We hereby claim the benefit of 35 U.S.C. § 119 of the foreign application for patent listed below and have also identified on said list any foreign application for patent or inventor's

RISSUE DECLARATION UNDER 37 C.F.R. § 1.175  
ISSUE APPLICATION OF U.S. PATENT NO. 5,920,530

certificate on this invention having a filing date before that of any foreign application on which priority is claimed:

<u>Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Priority Claimed</u>
084578/96	JAPAN	March 13, 1996	YES

The priority document was filed in application No. 08/816,138, which is patented as U.S. Patent No. 5,875,163.

In compliance with 37 C.F.R. §§ 1.175(a), we hereby declare and state that the above-identified U.S. Patent No. 5,920,530 is believed to be at least partly inoperative for the reason that claim 1 of the above-identified patent includes a term that is used differently in the description of the specification.

Pursuant to 37 C.F.R. section 1.175(a)(1), we state as follows at least one error in the patent, which is relied on as a basis for this reissue.

The patent claim 1 recites a "unit period signal generator" in the first paragraph of the body of the claim. The unit period signal generator represents the reference signal generator 13 which generates a period signal of the unit length T corresponding to the bit interval of the recording information, typically shown in Figs. 4 and 11 (column 7, lines 5-53).

On the other hand, in the description of the specification of the above identified U.S. Patent, the term "unit period" is defined as the period of a sync frame that has the length of 1488T, on column 5, lines 58-59.

In order to remedy the problem described above, the amendment to claim 1 has been formulated to recite a unit length signal instead of the unit period signal. The basis for the newly introduced term "unit length" exists on column 7, line 52.

New claims 5-6 depending from the amended claim 1 and a new claim 7 depending from claim 6 have been added to recite the unit length more particularly and to recite the relationship between the period of a sync frame and the unit length.

Specifically, the new claim 5 recites that the unit length corresponds to a bit interval that is specified by a recording format used for recording the information data. The new claim 6 recites that the unit period is a sync frame. The new claim 7 recites that the sync frame has a length which is 1488 times the unit length.

It is to be understood that the features recited in the new claims 5 - 7 are clearly described in the above-mentioned portions of the description of the patent, and no new matter has been introduced.

Additionally, in compliance with 37 C.F.R. §§1.175(a), we hereby declare and state that the above-identified U.S. Patent No. No. 5,920,530 is believed to be at least partly inoperative for the reason that we claimed less than we had the right to claim in the patent. The patent claim 1 recites, in the preamble, an information recording medium having pre-pits which are formed at periodic intervals having a period that is  $m$ ,  $m$  being an integer, times as large as a unit period in accordance with pre-information recorded at an interval which deviates from said periodic intervals by an interval that is  $k$ ,  $k$  being an integer, where  $k < m$ , times said unit period in accordance with recording positions.

It is believed that above-described feature relating to the period of periodic intervals is not essential to the important concept of the subject invention and a new apparatus claim is added that recites, in the preamble, an information recording medium having pre-pits which are formed at periodic intervals. The patent claim 1 also recites a recording means for recording the information data supplied from the memory on the recording medium. It is believed that a recording device may be recited in the body of the new apparatus claim instead of the recording means recited in the patent claim 1. Thus, a method claim which recites steps corresponding to the claim elements of the new apparatus claim is added.

In view of the points described above, the new claims 8 and 9 have been added.

New claim 8 corresponds to the patent claim 1, except that the details of the predetermined periodic intervals of the pre-pits recited in the preamble of claim 1 have not been carried over into the preamble of claim 8 and in the body of the claim 8 a recording device is recited instead of the recording means recited in claim 1. In the body of the new claim 8, essentially the same claim elements as those of claim 1 are recited. New claim 9 is a method claim corresponding to the new apparatus claim 8, in which steps that respectively

correspond to claim elements of the claim 8 are recited.

We submit that the new claims 8 and 9 are believed to contain allowable subject matters in view of the fact that the prosecution history of the instant patent indicates that no prior art has been cited that teaches or suggests an information recording apparatus including a combination of: a unit period signal generator; a memory; a pre-pit signal reproducing circuit; and a phase-locked loop circuit relative operated as particularly recited in claim 1.

The purpose of seeking a reissue patent is to correct the scope of the claims and to correct the insufficiency in the patent claims by presenting new claims which are commensurate with the true scope our invention.

Pursuant to 37. C.F.R. § 1,175(a)(2), we state that all errors being corrected in the reissue application up to the time of filing this declaration arose without any deceptive intention.

We hereby appoint John H. Mion, Reg. No.18,879; Donald E. Zinn, Reg. No.19,046; Thomas J. Macpeak, Reg. No.19,292; Robert J. Seas, Jr., Reg. No.21,092; Darryl Mexic, Reg. No.23,063; Robert V. Sloan, Reg. No.22,775; Peter D. Oleky, Reg. No.24,513; J. Frank Osha, Reg. No.24,625; Waddell A. Biggart, Reg. No.24,861; Robert G. McMorrow, Reg. No.19,093; Louis Gubinsky, Reg. No.24,835; Neil B. Siegel, Reg. No.25,200; David J. Cushing, Reg. No.28,703; John R. Inge, Reg. No.26,916; Joseph J. Ruch, Jr., Reg. No.26,577; Sheldon L. Landsman, Reg. No.25,430; Richard C. Turner, Reg. No.29,710; Howard L. Bernstein, Reg. No.25,665; Alan J. Kasper, Reg. No.25,426; Kenneth J. Burchfiel, Reg. No.31,333; Gordon Kit, Reg. No.30,764; Susan J. Mack, Reg. No.30,951; Frank L. Bernstein, Reg. No.31,484; Mark Boland, Reg. No.32,197; William H. Mandir, Reg. No.32,156; Scott M. Daniels, Reg. No.32,562 and Abraham J. Rosner, Reg. No.33,276, our attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and request that all correspondence about the application be addressed to SUGHRUE, MION, ZINN, MACPEAK & SEAS, 2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3202.

We hereby declare that all statements made herein of our own knowledge are true and.

that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 7/4/2001

First Inventor:	Kazuo		KURODA
	First Name	Middle Initial	Last Name

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Date: 7/3/2001

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Date: 7/4/2001

Third Inventor:	Toshio		SUZUKI
	First Name	Middle Initial	Last Name

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Signature:	<i>Toshio Suzuki</i>		
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Citizenship:	Japanese		
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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q65389

Kazuo KURODA, et al.

Appln. No.: 09/899,104

Reissue of U.S. Patent 5,920,530

Group Art Unit: 2653

Confirmation No.: 2743

Examiner: Thang V. TRAN

Filed: July 06, 2001

For: ROTATION CONTROL APPARATUS OPERATING WITH A SYNC SIGNAL  
HAVING VARIABLE INTERVALS

CONSENT OF THE ASSIGNEE TO REISSUE PURSUANT TO 37 C.F.R. § 1.172(a)

Assistant Commissioner  
for Patents  
Washington, D.C. 20231

Sir:

PIONEER ELECTRONIC CORPORATION is the assignee, i.e., owner, of the entire right, title and interest of the technology disclosed and claimed in Kuroda et al., U.S. Patent 5,920,530, which issued on July 6, 1999, as evidenced by the Assignment recorded at Reel 8812, Frame 0945. A statement under 37 C.F.R. § 3.73(b) was filed in the above-identified application on February 12, 2002.

PIONEER ELECTRONIC CORPORATION hereby certifies that the above-mentioned Assignment has been reviewed and to the best of PIONEER ELECTRONIC CORPORATION's knowledge and belief, the entire right, title, and interest is in PIONEER ELECTRONIC CORPORATION, which is seeking to take this action.

PIONEER ELECTRONIC CORPORATION hereby consents to the filing of a Reissue Application of Kuroda et al., U.S. Patent 5,920,530.

U.S. APPLICATION NO.: 09/899,104  
REISSUE OF U.S. PATENT 5,920,530

By virtue of my position at PIONEER ELECTRONIC CORPORATION, I am authorized  
to sign this written consent on behalf of the assignee, i.e., PIONEER ELECTRONIC  
CORPORATION, of Kuroda et al., U.S. Patent 5,920,530

Date: Apr. 10, 2003

Jun Ikeshima

Name: Jun IKESHIMA

Title: Manager

PIONEER ELECTRONIC CORPORATION

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**CERTIFICATE UNDER 37 C.F.R 3.73(b)**Applicant: Kazuo KURODA, Masayoshi YOSHIDA, Toshio SUZUKI Confirmation No. 2743Application No. 09/899,104 Filed: July 06, 2001Entitled: ROTATION CONTROL APPARATUS OPERATING WITH A SYNC SIGNAL HAVING VARIABLE INTERVALSPIONEER ELECTRONIC CORPORATION, a

Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc)

certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A.  An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 8812, Frame 0945, or for which a copy thereof is attached.

OR

**FILED**B.  A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below.

1. From \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at

Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

 Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Oct. 29, 2001

Date

Jun Ikeshima

Signature

Jun IKESHIMA

Type or Printed Name

Authorized Signing Officer

Title

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<b>REISSUE PATENT APPLICATION STATEMENT AS TO LOSS OF ORIGINAL PATENT</b>		Docket Number (Optional)
<p>I hereby state that:</p> <p>I am the applicant for a reissue patent based on the original patent identified below.</p>		
Name of Inventor(s)/Assignee(s)      PIONEER ELECTRONIC CORPORATION		
Patent Number      5,920,530		
Title of Invention      ROTATION CONTROL APPARATUS OPERATING WITH A SYNC SIGNAL HAVING VARIABLE INTERVALS		
Reissue application number (if known)      09/899,104		
<p>The ribboned original patent grant is lost or inaccessible.</p> <p>The ribboned original patent was discarded when the Assignee made an electronic record (on a CD-ROM) of the patent.</p>		
Signature <i>Jun Ikeshima</i>		
Typed or printed name      Jun IKESHIMA		Date      Oct. 29, 2001
Title (e.g. inventor(s), officer of assignee)  Authorized Signing Officer		

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